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ILLINOIS AGRICULTURIST

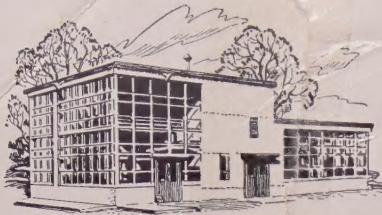


Fifty-Third Year

MAY, 1949

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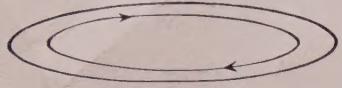




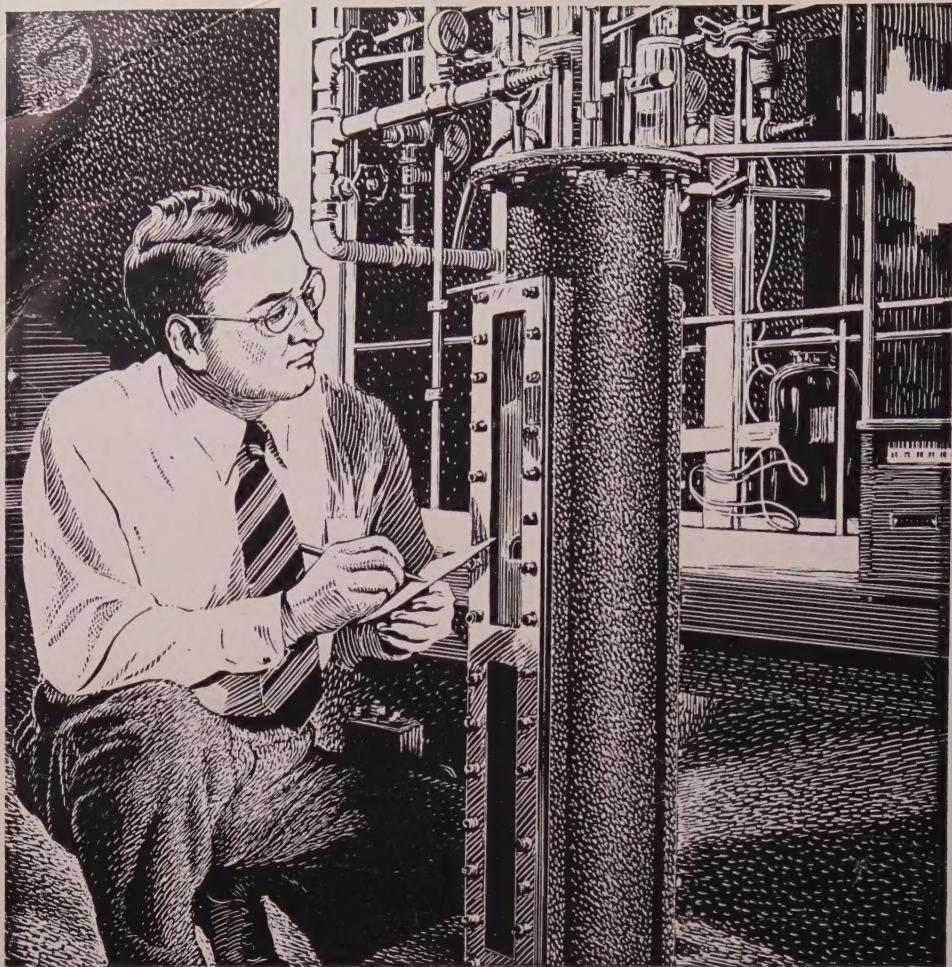
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part of G-E Research Laboratory,
is the center of General Electric
research into such low-temperature
phenomena as...



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meaning that at near-absolute zero
it loses its viscosity, can spin forever
...and



SUPER-CONDUCTIVITY—the
loss of all electrical resistance by
some materials below about 15°
absolute.



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THE ILLINOIS AGRICULTURIST

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MAY, 1949

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OUR COVER: Everyone, young and old, likes flowers in the springtime. See story on page 14. Photo courtesy of du Pont Company.

OUR PLATFORM

To acquaint students and faculty in the College of Agriculture, agricultural leaders, and the rural people of Illinois with the latest scientific developments in agriculture and home economics.

To report events of general interest on the College of Agriculture campus.

To serve as a means of training agricultural and home economics students in journalism and business administration.

To promote the best interests of agricultural and home economics students on the campus of the University of Illinois.

PARTING SHOTS

It's a time-honored tradition that the retiring senior editor on Illini student publications cast a few parting shots in the last issue of his publication.

Since I am looking forward to completion of my undergraduate days about August 13, I can look back over these past three years and truthfully say that they have been the most enjoyable of my life.

Since I had returned to civilian life only three weeks before entering the University in September, 1946, I seemed to compare my new environment here on the campus with the military experience I had so recently known. I compared every instructor with my superior officers in the months before, long registration lines to chow lines, and the filling out of study list forms as just another ordeal that must be completed.

But I soon realized how mistaken I really was as I began to become acquainted with my classmates and teachers during that first semester. My new friends could never be compared to those I had associated with in service. These fellows had the same background as I. They had come to college voluntarily because they wanted to improve themselves by receiving an education.

From my associations with the faculty, I can see very clearly now why many of them are respected throughout the state and nation as authorities in their field. They have devoted much of their lives to study and teaching so that students may receive the best and most up-to-date information. They are always willing to help and give advice to any student. I don't believe there is a finer group of people anywhere.

But besides students and faculty, the campus would not be complete without student activities. The organizations on the campus are a vital part of the education to all students who participate. They are given a chance to work with others, to make friends, and learn by doing. It is unfortunate that so many overlook the value of participation in some extra-curricular activity.

Certainly the college career of any aggie is not complete without participating in the all-ag field day, plowboy prom, and the ag or home ec club meetings. Perhaps I should also add—contributing some article, poem, joke, or editorial to the Illinois Agriculturist or assisting in advertising or circulation. After all, the Agriculturist is the publication for all the students in the College of Agriculture, not for a few who too often in the past have carried on the publication of the magazine.

Certainly everything here on the campus is not perfect. Some students lack the initiative and the consideration for others so that they certainly do not deserve the degrees they will receive. Some instructors could present their courses more effectively. However, all things considered, I don't believe there is a better college or a better campus than the College of Agriculture at the University of Illinois.



Left to right: Russell Lewey, Glyndon Stuff, Paul Vogen, Gilda Gleim, Jack Bingham, and Koreen Krapf.—Photo by Warren Bundy

Introducing the New Staff

By Harold Guither

In a few weeks final examinations will be here once more and another school year will be over. While most of you are looking forward to graduation or summer vacation, there are some people on the ag campus who are looking ahead much further. They are the new editors who will carry on the publication of the Agriculturist for its 54th consecutive year: Russell Lewey, editor; Paul Vogen, business manager, Gilda Gleim, woman's editor.

Russell Lewey hails from Hillsboro and is a junior majoring in agricultural education. He has served as president of the ag. education club, on the student faculty advisory board for the agricultural club, and is a member of Alpha Zeta. Russ has worked on the editorial staff for the past three years and has written some of the best features in the magazine.

Paul Vogen comes from Newark, Ill. He has been a member of the business staff for three years. Besides majoring in ag education, he has been very active in campus activities. These include Ag education club, Ag club, all-ag field day committees, plowboy prom, ag club amateur hour, Alpha Zeta, and Star and Scroll. Paul is a member of Farm House Fraternity.

Gilda Gleim is from Grand Ridge, Ill. She will be a junior in home economics education. Gilda transferred from Illinois Wesleyan this past year. While on the Illinois campus, she has been active on the editorial staff, the home economics club and the University Choristers.

To assist the staff heads in their duties and help to expand the scope of the

magazine, assistants have been named to each position. Glyndon Stuff, Dixon, has been named assistant editor; Jack Bingham, Peoria, assistant business manager, and Koreen Krapf, Manhattan, assistant woman's editor.

For a retiring editor, there can be no greater satisfaction than to know that the magazine will be in good hands in the year to come. Meta Marie Keller and George Johnson join with me in extending congratulations and best wishes to the new editors for a successful year ahead.

JOB OPPORTUNITIES

By John Linsner

This year, as they have in previous years, the June grads want to know what the employment prospects will be. They ask, "Will there be a variety of jobs from which to choose? Are there enough jobs? Is there a job for me?"

Recent newspaper and magazine articles have stressed the limited number and variety of jobs available to graduating seniors. They have blamed these changes on the present economic instability, the large number of students who will graduate this year and the slackening off of a demand for college trained men which was created by the war. This latter holds true, especially for the technical fields.

Aggies who graduate in June will not be confronted by a "saturated" employment field. There still seems to be more jobs available in the agricultural fields than there are men to fill them.

A recent survey of this year's February grads indicates the variety and some of the types of jobs that will be available to those who receive their sheepskins in June.

Of the 57 men who graduated in February, 50 reported their immediate plans. Ten men voted for higher education and signed with the graduate school at the University. The farm beckoned to 11 more.

Three are teaching vocational agriculture. These are Frank Crawford at Hutsonville, Arthur Phillips at Eureka and August Wickert at Antioch. The extension service boasts four new assistant farm advisers from among the February grads. Earl Sneedley is in Coles county, Jack Wasson in St. Clair county, Bob Hollensbe in Shelby county and Harold Brinkmeier in Carroll county.

John Schroeder and Cordie Ogg are working with the U. S. D. A. Schroeder is a grain inspector and supervisor with the Product and Marketing administration at Galveston, Texas, and Ogg with the Indianapolis, Ind., division of that administration.

Two men have taken jobs with Swift and company. Riley Churchill is with the Chicago branch and William Horin at Hammond, Ind. Bob Curran is in the Student Training program of Cudahy Bros. at Cudahy, Wis.

The field of farm management called three of the grads. Tom Moffett is working at McLean, Ill., Earl Surratt with Doane Agricultural service in Ames, Iowa, and Burton Hasselberg with Green Farm Management company in Peoria.

Al Culver is now assistant herdsman at Lynwood Farm, Carmel, Ind., and Ralph Linsley is a tester for the DHIA.

The larger firms are always looking for men trained in agriculture or with agricultural experience. Such firms as Pet Milk, International Harvester and Purina Mills have hired some of the February graduates. The Pittsburgh Plate Glass Co. has hired Carl Martin for its Insecticide Sales division at Mt. Vernon.

The California Packing Corp. at DeKalb has a new fieldman, Charles Davidson. Fred Danner is with the Shelby County Service Co. at Shelbyville and Charles Erickson with the IAA. Both men were hired as assistant managers.

Sufficient Jobs

The job opportunities for the June grad will be as plentiful and as varied as were those for the February graduates. The vocational agricultural field will probably have sufficient openings to accommodate all men qualified to teach, according to C. D. Smith, administrative assistant, College of Agriculture.

Therefore, the answers to the questions at the opening of this article are: There will be a variety of jobs from which to choose; there will be enough jobs; there should be a job for you.

LET'S KILL THOSE FLIES!

By Orville Sauder

Flies are one of our greatest menaces. They spread over twenty human diseases, including typhoid, dysentery, diarrhea, and tuberculosis. In addition they are strongly suspected transmitters of poliomyelitis, as the virus of this disease has been found on the bodies of flies.

Not only do they spread human disease. Flies are responsible for reducing beef gains as much as one-half pound a day and for reducing milk production as great as fifteen per cent. There is also strong evidence that they carry anthrax, cholera, parasitic worms, and many other domestic animal diseases, especially of poultry.

The three kinds of flies with which we are most concerned are the house fly, the stable fly, and the horn fly. The house fly is the promiscuous feeder that may be found anywhere from houses to barns, manure piles, and other decaying organic materials. It does not bite, but carries and disseminates germs wherever it goes. It feeds by sipping on either liquid foods or on solid foods which it first dissolves in its saliva.

The stable fly feeds on blood from cattle with its piercing-sucking mouth parts. In appearance it resembles the house fly. It is found principally on or near cattle, on the outside surfaces of barns, on feeders, and around manure piles.

Horn flies are about half the size of house and stable flies. Usually they remain within the herd and are found especially on the backs, necks, and shoulders of cattle. They, like stable flies, feed on blood.

Fly Control Is Possible

Fortunately, controlling flies is now possible. The first step in control is sanitation. Flies reproduce very rapidly. So rapidly, in fact, that one pair of flies, under ideal conditions, would have 191,000,000,000,000,000,000 progeny in one season.

Conditions are never ideal, but this figure serves to illustrate the importance of sanitation to make fly breeding more difficult. Garbage should always be disposed of promptly, and manure should be hauled to the fields at least twice each week.

The second step is the use of insecticidal control measures. In 1948 DDT was recommended. Entomologists are making the same general recommendations this year.

However, since the Food and Drug Administration has found small traces of DDT in milk, they do not advise further use of DDT on dairy cattle or in dairy barns. Methoxychlor is now recommend-

ed as a substitute for this purpose. It is used pound for pound at the same rate as DDT.

Dairy cattle should be sprayed once each two weeks with a solution of one-half pound of methoxychlor 50 per cent wettable powder in three gallons of water. It should be applied at the rate of one pint for each animal. Only the front half of the cows need to be covered, as that is where the flies chiefly predominate.

Methoxychlor is about equal to DDT in effectiveness and does not leave a poisonous residue. Its disadvantage is that it costs about twice as much as DDT. Last year's recommendations for other uses of DDT therefore remain the same.

Recommendations for DDT

According to these recommendations, one-half pound of actual DDT should be applied for each 1,000 square feet of surface. Thus when 50 per cent wettable powder is used, one pound of this material is dissolved in three gallons of water. This spray should be applied to inner and outer surfaces of farm buildings, to fences, shrubs, and wherever else flies are likely to be found.

Beef cattle should be sprayed with DDT once each month. Two quarts of a solution of one-fourth pound of powder in three gallons of water is used for this purpose.

In certain areas of Illinois where spraying has been carried on extensively for several years, DDT resistant strains of flies have been built up. If you happen to be living in one of these areas you may still control flies at a reasonable cost.

Laboratory tests have shown that these flies may be readily controlled with chlordane emulsions. These emulsions contain one-half to two per cent chlordane. They should be applied at the rate of one gallon for each 1,000 square feet of surface. The treatment, in using chlordane, will need to be repeated at intervals of one month during the fly season.

Fly Control Campaign

Fly control is not an ideal. It is actually a practical possibility. Last year a statewide campaign was carried out in Illinois under the joint sponsorship of four agencies: the State Department of Public Health, the State Natural History Survey, the College of Agriculture, and the Illinois Agricultural association.

The campaign was actually carried out through the offices of the county farm and home advisers. With material supplies and publicized by the four agencies

(Continued on page 12)



Applying DDT Solution to steers with a force spraying outfit
at the University animal science farm



Top (left to right): Mary McPherson, Betty Reynolds, Mary Coapstick, Jane Roe.
Bottom (left to right): Dorothy Peterson, Miriam Wrigley, Mary Lee Spittle.

WHY I MAJORED IN HOME ECONOMICS

By Seven Home Ec Seniors

After you get that sheepskin in June of 19??, what will you be prepared to be? Now is the time to decide.

Of the 43 home economics graduates of 1949, these seven girls are representing the seven departments of home economics. Of course, each girl is very enthusiastic about her major. What they say may help you in the future.

Institutional Management

By Jane Roe

I am proud to say that I am a student in institutional management. No one except a fellow classmate who has followed the same major can understand completely how it feels to be nearly finished . . . with your classroom education behind you and your practical training ahead of you.

You know that soon your future holds an appointment in a restaurant, tea-room, or cafeteria, the aim that prodded you all along the four years of study. You know that you have completed the required academic courses that the institutional management majors must have. You have learned to uphold high food standards, to improvise scientific management, to correctly use quantity recipes and equipment, and to be efficient buyers.

The course stretches into managing personnel, extending hospitality, and satisfying the customer—your guest. All of these things are very appealing to the student, but as the old saying goes "proof

of the pudding is in the eating," proof of the field of institutional management is in the tasting of the training.

Last summer I had the opportunity to stimulate my training appetite by working in a cafeteria and foodshop in Minneapolis, Minnesota. The training was only long enough to lightly touch upon the many working phases that compose a food business of this type.

Long experienced bakers gave their time to teach the trainees some tricks of the trade. Whoever dreamed of rolling some seventy-five pie crusts in less than hour? We learned to do it . . . by machine. And they were as good as any pie crust you could ever want.

Cookies of most any kind—date nut, chocolate chip, coconut, ginger, orange almond, peanut butter appeared like magic; just a twist of the wrist with a standardized dipper or the rolling machine and they were on the trays ready for baking. The baking was by mass production too, using huge revolving ovens that support six individual trays to hold the baking goods.

The bake shop calls for early morning duty beginning about 4:30 a. m. Can you imagine dragging yourself out of bed at that hour to play nursemaid to a quantity of batters and doughs? Probably you can't, but when you enjoy working with foods as much as institutional management majors do, early rising and unusual hours are merely part of the routine. The work when enjoyed is like play. Your day is finished before you know it.

General Home Economics

By Miriam Wrigley

To anyone outside the field, the general home economics major probably has one of the duller sounding futures and the most unglamorous outlook for a job. However, in this, as is any other matter, the profession is what you make it.

A girl could prepare herself for food demonstration work by selecting a few more elective hours in foods and nutrition. This would be the type of work done in the kitchens of the utility companies as a consumer education service.

There is quite a broad field in home economics journalism for women of today. Newspaper and magazine work is good, as is radio, and television is just beginning to show its possibilities. Any-one with a flare for writing might consider this area seriously.

With a background predominantly of textiles and secondarily of the housing courses, one could mold a future in interior decoration. This offers a very definite challenge with the rise in housing construction.

Extension work comes under the category of general home economics also. At present, one course in extension is required in combination with an overall background of home economics. Your job here would deal directly with people and especially farm people throughout the state, in 4-H, Home and Farm Bureau.

The field that has caught my attention is that of another type of adult education. This work is dealt with by high school night classes, through other types of community and city organizations, and through personal initiative. Your talents can be used in teaching clothing, foods, or housing, as you wish, or as the need arises.

To place homemaking last is not to shun this able profession. There are few women who do not wish to have a home of their own either after or paralleling their career. The general major offers an overall picture of home economics combined with many of the practical aspects and gives the best foundation for better homemaking.

Child Development

By Mary McPherson

I chose to major in child development so that I might ultimately be a better wife, homemaker, and mother. At the same time I am preparing for a more immediate career as a nursery school teacher, or a social worker, or perhaps even a counselor in family relations. I knew I was fond of children and enjoyed being with them. The idea that really "sold" me was the fact that in the first six years of a child's life play is the most important part in his later development, both physically and mentally. I felt that

here I could do more good and perhaps help more people than in any other way. Then, too, it would never be dull. Have you ever seen a three year old do the same thing twice?

Child development is based upon the principle of mental hygiene. It is concerned with the establishment of conditions which will lead to the preservation of good mental health. Its concern is not with the mentally ill people, but with the everyday problems, decisions, and conflicts that you and I have. The origin of the problem is found, along with the carry-over it has for the person today. When this is known, the problem can be faced and a solution can be found. Therefore, as one works with children, sees their problems, and finds solutions for them he is also helping himself to become a better person. He begins to understand his feelings and reactions along with those of others. He learns to get along with people. He becomes a mature individual.

The child development curriculum helps you as a person in a way that you will always use. It prepares you for an intelligent, successful marriage. It gives you a basic pattern for family life. It prepares you to raise a family that will have fewer doubts, conflicts, and problems because you have helped them learn how to prevent such problems. They in turn will carry on into a mature family relationship of their own. All these are gratifying, but I receive the greatest reward when a child, who is not yet filled with the defensiveness of an adult, comes to me with complete trust and confidence for help. This child expects, and deserves the best answer. I want to give it to him; that's why I chose to major in child development.

Hospital Dietetics

By Mary Lee Spittler

The primary purpose of a hospital dietitian is to feed the sick and well with nutritionally good food, adequately prepared, and attractively served. To do this she must have a knowledge of the foods, their methods of preparation, and the effect that the foods have upon the patients. This takes us back to physiology, diet in disease, and bio-chemistry.

She must know the use and care of all equipment used in quantity cookery. She must understand the organization and management behind the institution, and have a knowledge of personnel and labor problems.

In planning the menus the dietitian must consider people who are on the general diet and also those who are on the special diets such as soft, liquid, non-residue, etc. She feeds not only the patients, but doctors, nurses, guests, and employees. She has to consider the race and religion of the people in her institution and also serve holiday meals.

After graduating from college, a student majoring in hospital dietetics must take a year internship in some hospital recommended by the American Dietetics Association. During this time she can get practical experience in all phases of a dietitian's work and must apply what she has learned in college.

Clothing Merchandising

By Mary Carolyn Coapstick

I have majored in clothing and textiles with a good commerce background and a liberal education in the arts and sciences.

I plan to work in a department store. Since I have had no experience I will begin as a regular sales clerk. The particular store for which I plan to work has a special contingent of selected personnel. Each person is given a year's executive training. These people are placed in different departments within the store for periods of one to three months. At the end of a year, each is placed in the position he fulfills best. I am most interested in fashion goods—either from the commercial side or from the fashion expert angle.

It seems to me that such courses as advertising, marketing, retailing, salesmanship, accounting and personnel administration will be very useful in almost any phase of department store work. Then, such courses as history of costume, fashion analysis, clothing selection, textiles, costume design and clothing construction will apply specifically to clothing and fashion fields. A knowledge of these things will enable me to help others who haven't had this training. This country is known for the large number of well dressed women; still many spend money on clothing very haphazardly and often disastrously.

Teacher Training

By Betty Reynolds

People never fail to ask small children, "What do you want to be when you grow up?" I was no exception and my answer was always, "Oh, I want to be a teacher." This idea has continued all through school, varying only in the kind of teaching that I wanted to do. Sometimes it was teaching kindergarten and other times teaching adults as a demonstrator for a utility company. Nevertheless, it

(Continued on page 14)

Woman's Editor Wins Trip to Norway

How are you going to spend your summer? Meta Marie Keller, our woman's editor, is going to spend her summer differently than many of us. She's going to live with a farm family in Norway as a United States delegate.



META MARIE KELLER

Meta Marie, whose home is near Streator in LaSalle county, has recently been selected as one of 27 young rural men and women from 20 states as delegates from the United States to foreign countries. This is sponsored by the International Farm Youth Exchange Project of the United States Department of Agriculture.

The project is devoted to the development of informed junior rural leadership. These delegates, by living during the summer months amidst our foreign neighbors in Europe receive direct realization of some of the problems, attitudes, talents, and contributions of rural people in these countries.

Farm youth from the cooperating foreign countries likewise have the opportunity to come to our country for the summer months; thus, creating an exchange affair.

Meta Marie no sooner achieves one distinction until she starts working for another; truly living up to her 4-H motto of "Making the Best Better." This June she will graduate here in agriculture, majoring in home ec extension. Her ideas and ambitions at present are of being a home adviser and do work with rural youth and rural adults.

As we said previously that she was certainly a busy little bee, we fully realize it when we see that she has been busy in 4-H work for eleven years, salutatorian of her high school, delegate to club congress 1945 and national clothing winner of the same year, and delegate to National 4-H Camp in 1948. Also, at the University she is a member of Phi Upsilon Omicron, president of Home Ec club, co-chairman of Plowboy prom 1948, and woman's editor of good old **Illinois Agriculturist** this past year.

All her friends here at the University join with hearty congratulations to Meta Marie on this most recent award and opportunity.

Goats Advance Breeding Research

By Lyle Toepke

The use of goats to study the effects of intensive inbreeding and then crossing these highly inbred lines is being used for the first time here at the College of Agriculture.

The dairy production department purchased its first goats in 1940 and started the inbreeding experiment in 1948 when four Nubians and five French Alpines were added. E. E. Ormiston, assistant professor of dairy production, is conducting the study with the assistance of R. W. Touchberry, assistant professor of dairy cattle genetics.

Reasons for Using Goats

Ormiston gave the following reasons for using goats in this pilot study. They are ruminants and eat the same kind of feed as dairy cows. They yield a product similar to that of the dairy cow. Lastly, they produce young at an earlier age and in greater numbers thereafter than do dairy cows. Twins are usually born and triplets are not infrequent.

Breeds and Lines Used

The two breeds of goats being used in this experiment are French Alpines and Nubians. The foundation of both French Alpine lines and the Nubians are backed with Advanced Registry records.

The Helen family of French Alpines have some very outstanding records of production in the University herd. Illini Marquette Helen, the foundation of the line, has three records averaging more than 3,000 pounds of milk and 95 pounds of butterfat. When you compare these records to the average production of cows in Illinois, Helen's records are very outstanding. She has produced 19.6 pounds of milk in a single day.

To show the intensity of inbreeding which has been achieved to date, Illini Marquette Helen has twin grand daughters which have a coefficient of inbreeding of 37½ per cent. Such a high coefficient was obtained by the mating of full brothers and sisters for two generations.

The other inbred line of French Alpines is called the Pierre family. This line is unrelated to the Helen line and consists of four does and one buck. These five goats, four full sisters and a full brother, have a coefficient of inbreeding of 25 per cent. They are the result of mating a buck to his own daughter.

The above buck was mated to his full sisters and the first one to kid produced two doe kids. These kids have a coefficient of inbreeding of 37½ per cent.

Yvonne Del-Norte, paternal sister to the five original animals in the Pierre line and also paternal sister to their dam, is the holder of the world's record production for all breeds, regardless of age

and frequency of milking. Her record is 4,545 pounds of milk and 171.1 pounds of butterfat. She made this record in ten months as a two year old on three times a day milking.

These two families of French Alpine will both be inbred indefinitely. When their coefficient of inbreeding reaches 50 per cent, the two families will be crossed.

Crossing Inbred Lines Studied

This is where the main part of the experiment really begins, to study the effect of crossing highly inbred lines within a breed. Here Ormiston hopes to determine if heterosis, or hybrid vigor, occurs. If it does a super race may be developed capable of producing new levels of milk and butterfat. Or just what will be the results? Only time will tell and Ormiston is making no predictions of the outcome.

To complicate things further, the dairy department has a second breed of goats, Nubians, which enter the picture.

There are three does and one buck and they have a coefficient of inbreeding of 25 per cent, obtained by mating their sire to his own daughter. The other two does have a coefficient of 37½ per cent,

which was accomplished by three generations of sire-daughter matings. All four animals are closely related as they are all inbred to the same common parent.

This fall the buck will be mated to the three does and the progeny will be inbred indefinitely in the same manner as the Helen and Pierre families of French Alpines.

When the coefficient of inbreeding reaches 50 per cent, the Nubians will be crossed with the French Alpines to measure the effect of crossing highly inbred families between breeds. Nubians and French Alpines are about as different as are Holsteins and Jerseys.

As far as is known in neither dairy goats nor dairy cows have highly inbred lines within breeds or highly inbred lines between breeds been crossed to study the effect upon milk production, butterfat per cent, heterosis, or segregation of the genes.

Management of the Experiment

All of the goats are kept in a constant environment as nearly as possible. Daily milk weights are recorded and a composite sample is tested for butterfat each month. The birth weight is recorded for all kids born and growth measured by body weight, and body measurement is recorded for all kids at monthly intervals until they reach milk production. The growth records are kept on does until they reach maturity, which is about four to five years of age. Their life span is about that of the dairy cow.



Ormiston holding Illini Marquette Helen, the experiment's foundation animal, who produced as a four-year-old 3,208 pounds of milk and 100.1 pounds of butterfat in eight months and 29 days.



Strengthening the Basis of Our Economy...

The American standard of living is a tangible monument to the progress of free men. In no other country, in any age, have people enjoyed all the rights, privileges and benefits which we in this country now take for granted. We can point with pride to the accomplishments of this great nation, but we must also accept these rights and benefits as a responsibility that none of us can shirk without inviting trouble.

The industry and ingenuity, the cooperation and teamwork of American labor and management, the American system of free enterprise—these things made possible our present standard of living, which is the envy of the world.

These qualities, or attributes, of the American way of life are secure to us and our posterity only as long as we continue to exercise vigilantly and diligently our responsibilities in a democracy. Elsewhere in the world, these responsibilities would not be considered a disagreeable obligation but a welcomed privilege. The exercise of our franchise to vote . . . the willingness to do more than is expected . . . the cooperativeness to give ground at personal sacrifice for the common good of all mankind . . . the ingenuity to overcome apparently insurmountable obstacles—these are but practical applications of the golden rule which will secure the continuation of the blessings of our free enterprise system and democracy.

We have many obligations to discharge if we are to maintain the pace of progress and strengthen the basis of our economy. We must conserve our natural resources so that our children and our children's children will not face want, social unrest, and an uncertain future.

Food, clothing and shelter are derived from the soil. Without these products of the soil, the wheels of industry would cease to turn; business would suffer; the economic welfare of the nation would deteriorate; and unemployment with its bitter consequences would again haunt many American homes.

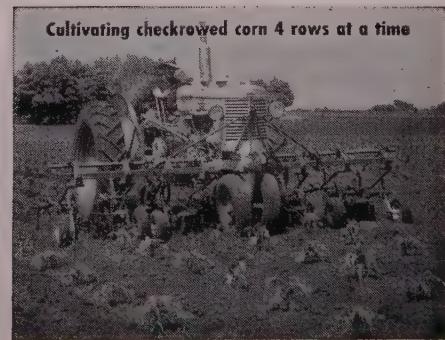
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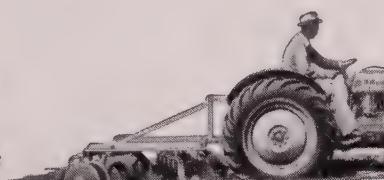
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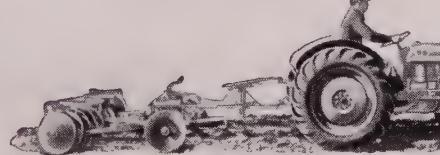
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Ford Farming

MEANS LESS WORK . . .
MORE INCOME PER ACRE

FLY CONTROL . . .

(Continued from page 5)

cooperating, newspapers and magazines throughout the state pushed action and helped inform people of the need for fly control.

Was this campaign successful? Yes indeed! Illinois farmers made \$5,887,000 in extra gross income with a cost of \$1,226,000 through sanitation and DDT spraying. This means an added net profit of \$4,661,000.

More than 753,000 dairy cows were sprayed with DDT. An estimated increase in milk production of 93,250,000

pounds of milk resulted. This milk, if valued at three dollars a hundred, is worth over \$2,700,000. As the cost of spraying was only \$270,000, these dairy-men made an extra net profit of \$2,430,000.

Beef cattle, too, responded to DDT spraying in this campaign. A total of 1,126,000 head were sprayed with an increased gain in weight of 12,150,000 pounds. That would make a lot of steaks! Figured at the rate of \$25 a hundred, it's worth at least \$3,187,000. Since spraying costs amounted to \$956,000, a net profit of \$2,231,000 was made.



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Applying a 5 per cent solution of DDT as a residual control.

The buildings were sprayed on at least 100,000 farms—over half of all the farms in Illinois. Ninety-one per cent of these farmers stated that they were satisfied with the results.

Not only farmers profited by killing flies, however. At least 260 towns were also sprayed in this campaign, and 250 of them reported good control.

Human Benefits From Fly Control

Dollar profits on farms can be estimated. But the many benefits from greater human and animal comfort and from lowering the disease spreading hazard cannot be measured. These benefits alone, without livestock production profits, make control procedures well worth while.

The campaign which was carried out last year was successful. But the job is not done! Plans are now being made to carry out an improved campaign this year. If you and all your neighbors cooperate, it can be even more successful.

WHAT IS A FARMER?

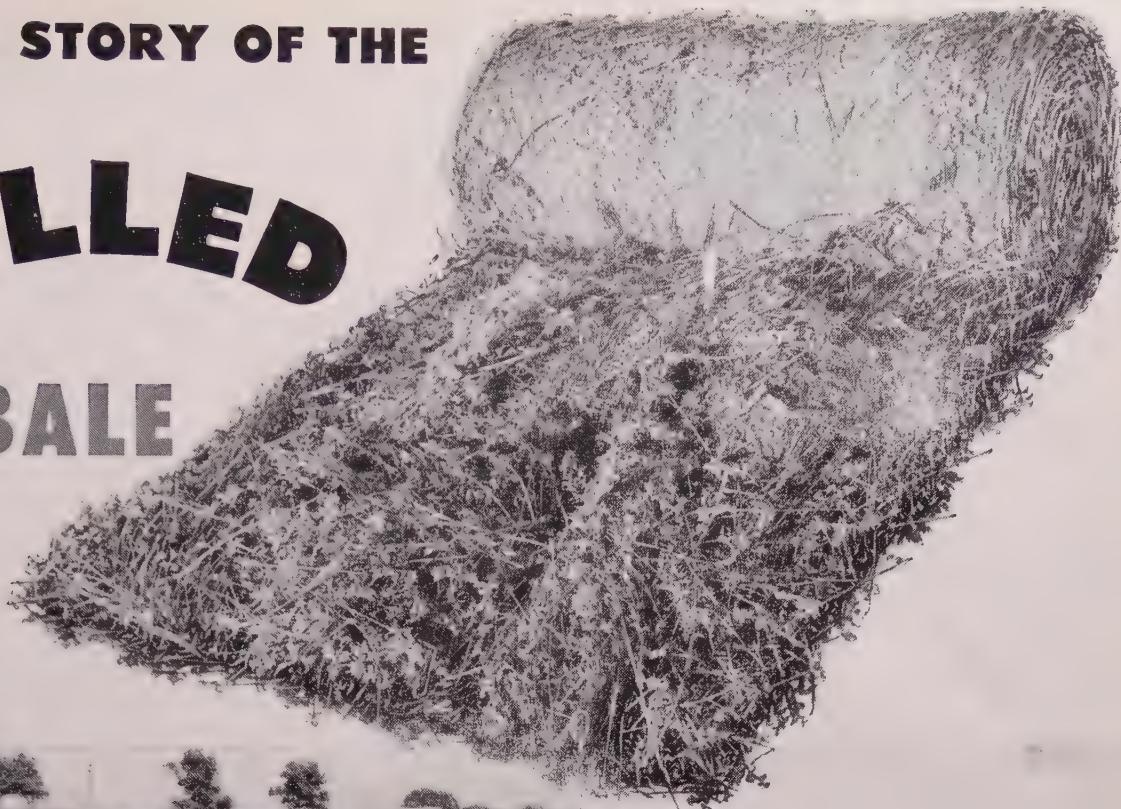
Engineer, Business Man, Botanist, Veterinarian, Economist, Lawyer and Meteorologist

A mighty big assignment for the student preparing himself to be a farmer. But the job can be simplified by the use of up-to-date and compact reference books. Follett's invite you to look over their wide selection of handbooks, outlines, and data-books for all the technical fields.

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INSIDE STORY OF THE ROLLED BALE



Double windrows are easily made by reversing direction of raking.

Ideal for the job is the new POWER DRIVEN air-tired Allis-Chalmers Side Delivery Rake and Tedder, with selective reel speeds. It steers true, makes straight, airy windrows.

You simply unroll it and there it is...a thick, leafy carpet of hay. The leaves are still on the stems. The natural protein and color are still there. Livestock show a preference immediately.

Roto-Baling is the new art of packaging hay or straw. The farmer pictured at left is showing how it is properly done. Wide *double* windrows cure fast and make the best rolled bales. (And you travel only $\frac{1}{2}$ as far per bale.)

The ONE MAN ROTO-BALER, for the first time, makes possible home ownership of your own machine. You can save your crop the hour it is ready. Once hay is in the rolled bale, you can breathe easy, *for it sheds rain like a thatched roof.*

ROTO-BALING is setting new standards for preserving hay *quality.*

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FLOWERS ARE FOR EVERYONE

By Koreen Krapf

Flowers aren't exclusively women's adornment. Men too, find that merely a buttonhole flower can give a fresh, crisp appearance and that "all's-right-with-the-world" look.

For daytime wear, many men like a cornflower, often called bachelor's button, even though both bachelors and married men wear it. This is the choice of many men because of its blue color; also it looks well with business or sports suits or white linens. Incidentally, bachelor's buttons signify "Circumstances demand celibacy and delicacy (If you can't be good, be careful.)"

A dark red carnation is man's own special because it harmonizes well with a light or a dark suit. Dark red carnations are correct with business suits, certain sport clothes, and white dinner jackets. This flower is rich in color, yet subdued and dark. Most men dislike very brightly colored lapel flowers.

However, yellow cornflowers or other small yellow flowers look well with brown suits. White carnations are very suitable for afternoon weddings with formal afternoon suits and dinner jackets.

The more formal gardenia is correct for formal evening tails.

To show their maximum degree of beauty, flowers worn by a woman should be placed on her costume so that they will carry out the lines of the costume. Above all, the flowers should be worn with their faces up—as they grow. Not only will the petals hold up better, but also the full beauty of the heart is seen.

A small woman should not wear large

flowers which overpower her nor should a large woman wear tiny, tiny flowers. Naturally, the colors of the flowers should be harmonious, either blending with the general costume or of contrasting complementary colors.

Keep in mind that flowers should never be worn to attract attention to one's self—they are always worn to add to the charm of the wearer. Therefore, they should be worn naturally and with ease.

Flowers of daring colors will help give life to a pale complexion. Likewise, girls with ruddy, out-of-doors complexions can very well wear flowers of cooler colors—blue, lavender, or even yellow.

Certainly, keep the occasion and costume in mind. Tweeds and sports clothes call for the rugged type flower, such as marigolds, carnations, chrysanthemums, or small dahlias. For dancing, dainty flowers like roses and orchids are popular. Appropriate for dramatic formal wear are exotic flowers, as begonias and camellias.

When dancing, girls wear flowers on the right shoulders. Also boutonniers are correctly worn on the right lapels of tailored suits.

In caring for flowers, it is well to leave them in the box until the last possible moment. Keep the box in a cool place.

Also, too much handling by warm hands does more damage than anything else.

Fasten flowers securely so they won't need to be pinned again and again, thus shortening their lives.

HOME EC MAJORS . . .

(Continued from page 7)
was teaching, and has finally narrowed down to teaching home economics.

In teaching, a person is able to put his beliefs to the test, and to keep growing in these beliefs from constant stimulation in working with people.

Teaching home economics is concerned not with mere facts, but with the way people live—feeding, clothing, housing, management, care and development of children, health, and social relationships. Since the development of people is of prime importance, we are not limited to any one phase of home economics, but are able to sample each and every one.

Home economics is able to make the unique contribution of meeting the personal needs of a student by really being interested in helping that individual meet his every day problems. A home economics teacher can help the student know how to dress, how to eat, how to get along with people, how to be better groomed, and how to act in various situations.

Nowhere else do you have such a wonderful way of finding "just what makes high school students tick." As one practice teacher said "It makes you feel that you're responsible for the lives of generations of people."

Foods and Nutrition

By Dorothy Peterson

Foods and nutrition is a scientific field with a maximum amount of emphasis on practical application. The ability to apply knowledge is of vital importance. Every opportunity has been given to me as a foods and nutrition major to receive practical experience as well as scientific theory.

In the advanced nutrition course, I am conducting an experiment on riboflavin and thiamin deficiencies. As subjects, I have nine Albino rats which I weigh, feed and care for. From this experiment, the actual proof of the value of vitamins is shown. Theory is put into actual practice.

I plan to work in Chicago, my home, in a test kitchen. Along with the experimental side of the work, I want to disseminate to the public, the importance of diet to health. This can be done by the development of new and better foods and by proper information for the public by way of newspapers and magazines. My desire is to combine the experimental side with public relations.

As a graduating senior, I can honestly say that if I had my college days to do over, I would without a doubt choose the same field. It has been interesting, and since it is a relatively new field it will afford unlimited opportunities in the years to come. From a personal viewpoint, I hope I can apply my knowledge of foods and nutrition in feeding my own family to keep them healthy and happy.

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This happy realization of a father's dream is being painted proudly on barns all over the land. In spite of the lure of the city and the appeal of exciting new occupations, more and more farm boys are sticking with the land.

Fondling plump kernels of number one grain at harvest time . . . topping the market with a load of sleek, fat steers—these and other farm thrills are hard to match. The miracle of germination and growth in the Spring, the fellowship of good neighbors, and the independence that comes from being your own boss, all combine to make farming not merely a way of earning a living, but a satisfying way of life.

In years gone by, back-breaking labor and spirit-dulling drudgery sent thousands of young folks scurrying off to easier jobs in the city. Today, it's a different story. Power equipment shortens the working day and saves much of the muscle work that used to be a part of farming. It reduces the weather hazard, slashes production costs, and helps to make farming a more stable and profitable business.

Yes, modern power equipment is helping more and more of our young folks make up their minds to stay on the farm. One of the best omens that better things are in store for our agriculture and our nation is the addition of two heart-warming words to farm names on thousands of barns—"AND SON"!

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Agriculturist Moves to New Office

"Does the Agriculturist actually have its office in Mumford hall?" That is the question that many ag students and faculty have been asking during the past few weeks. The answer, we are happy to announce, is yes!

Most important of the changes in your ag college magazine during this past year has been the moving of our office from the Arcade building behind Illini hall to our present location in room 326 Mumford hall.

There are many advantages of having our office on the ag campus. The staff finds it much more convenient to keep office hours between classes. Close contact with faculty members can be maintained. Advice from the extension editorial office close by will enable the staff to produce better Agriculturists in the future.

We are greatly indebted to our faculty

advisory board and to Dean Rusk for their efforts to secure part of this room for our office, the remainder of which will be used as a writing laboratory for students in agricultural journalism.

Our present staff of 35 members includes quite a number of graduating seniors. Many new staff members will be needed to carry on for next year. If you have an hour or two a week that you would like to use to become better acquainted with the ag campus and learn something about putting out a magazine at the same time, there is a place for you on our staff.

If you are interested, just drop into room 326 Mumford hall any day from 3 to 5. Here is the opportunity to express opinions about your likes and dislikes concerning your ag college magazine and help to make it bigger and better next year!

University Buys Land

Facilities for agricultural research work have been rather limited for some time now due to a lack of land. Three hundred twenty acres of good Champaign county soil have recently been purchased by the University so this deficiency will soon be removed.

Located just south of the horticultural orchards, between Lincoln and Race streets, the farm is in the ideal place for the expansion of the College of Agriculture farms. C. M. Webber and Gordon Kamerer sold the tract to the U. of I. for \$500 per acre.

Nothing definite as to the use of this land has been decided at the time of this writing. Several departments of the College of Agriculture have made bids for the use of this land, but only general plans have been made so far. The decisions about this will be based on topography, pasture areas, landscaping, etc. The two houses on the farm will probably be used for caretakers or for University staff members.

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A Groundhog's Shadow

... One Hundred Years Ago



See "Pageant of Progress," as thousands saw it daily for a week during the Wisconsin Centennial Exposition at Milwaukee last summer. Filmed then, this Case pageant of quaint costumes, strange skills, ancient tools and modern machines has been made into a full-color sound movie. Besides being shown by Case dealers, this 16 mm. film is available for meetings sponsored by educational agencies and farmer groups. Write now for reservation of future date. Address our nearest branch. J. I. Case Co., Racine, Wis.

At the start of the century spanned by Wisconsin's statehood, this was a fairly modern threshing rig. Six years earlier, Jerome I. Case had started in business with the groundhog—the taller unit next to the tread-power. The low part, extending like a shadow from the groundhog, was an added attachment. Aided by hand raking, it shook threshed grain from straw.

Within a dozen years Case was building complete machines that released the rake-hands, rolled on its own wheels, did the whole job better and far faster. Along the lengthening shadow of the groundhog appeared a host of advances—the Eclipse and Agitator threshers; horsepowers, steam engines and gas tractors; and in 1923 the prairie-type combine, pioneer of today's most modern harvest method. In one short century the equipment of farming advanced more than in all the earlier centuries.

American freedoms had broken the stagnation of centuries. Chief among them was freedom of any man to engage in any enterprise, and to keep what he earned by his work and his wisdom. As you defend that freedom you keep open the door of opportunity for yourself and for all Americans. As you look toward your farming career, look to Case for ever-better machines to make your hours more productive, your years more prosperous.



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